

Andrzej Synowiec
(Jagiellonian University, Kraków)

FROM THE HISTORY OF TOBACCO INDUSTRY IN POLAND – TOBACCO CULTIVATION IN PRODUCTION CO-OPERATIVES AND THE PROBLEM OF ITS MECHANIZATION IN THE 1950S

Abstract

The article analyses the issue of tobacco cultivation in production co-operatives and the problem of its mechanisation in Poland in the 1950s. The organisation of such co-operatives was one of the goals for Polish villages in the first Five Year Plan (1956–1960) in the People's Republic of Poland. In 1950 the area of tobacco cultivation by production co-operatives consisted only 0.12% of the land on which tobacco in Poland was grown; in 1955 this area grew to 1.46%, and in 1956 there was a small decrease to 1.3%. The following year, it decreased to 0.09% due to the dissolution of many co-operatives. Nevertheless, it was the surviving co-operatives that would benefit from the use of machinery, allowing for the first mechanisation of tobacco cultivation. These efforts were undertaken in the late 1950s.

Key words: tobacco industry, People's Republic of Poland (PRL), production co-operatives, tobacco cultivation, mechanisation of cultivation.

Słowa kluczowe: przemysł tytoniowy, PRL, spółdzielnie produkcyjne, uprawa tytoniu, mechanizacja uprawy.

In relation to the broad, forced collectivisation of agriculture in Poland after the Second World War, the tobacco industry was clearly interested in the issue of introducing the cultivation of tobacco into the newly-formed production co-operatives. The collectivisation of agriculture was to liquidate private land ownership and bring full control of Polish agriculture and its workers under the ruling communist Polish United Workers' Party (Polska Zjednoczona Partia Robotnicza – henceforth: PZPR). In these circumstances, the tobacco industry wanted to ensure itself adequate amounts of raw material as well as acquire the additional manpower and investments necessary for its development. The organisation of these co-operatives was among the guidelines stipulated in the

Five Year Plan (1956–1960). In the resolutions of the 7th Plenum of the PZPR we can read: “During the Five Year Plan, production co-operatives will be strengthened and further developed, respecting the principles of voluntariness, whilst providing the production co-operatives with the necessary economic privileging.”¹

However, it is necessary to emphasise that the crisis of October 1956 and the rise to power of Władysław Gomułka (who became the First Secretary of the PZPR on 21 October 1956) marked the beginning of a new agricultural policy for the communist authorities. The compulsory collectivization of agriculture was abandoned at least formally. The policy was criticised not only by individual farmers, but also by some politicians and economists. In the second half of 1956, the state administration showed great zeal in attacking and dissolving co-operatives.² As a result, one could observe a decrease in the number of production co-operatives, and a growing number of privately owned farms at that time. Production co-operatives established between 1948–1956, disintegrated rapidly.³ Out of over 10,600 co-operatives listed in the registers in September 1956, only about 3,100 achieved annual balances and income shares. The remainder collapsed in the second half of October and November 1956, or decided to dissolve and liquidate their production farms. Of the remaining 3,100, fewer and fewer were inclined to continue further joint production.⁴ According to data from the National Council of Production Co-operatives, there were only 1,838 active production co-operatives registered on 31 July 1957.⁵ The dissolutions were resisted only by those co-operatives organised on land acquired as a result of the agricultural reforms as well as those composed mainly of families of landless peasants.⁶

The aim of this article is to present the production of tobacco in selected production co-operatives as well as the attitude of Polish tobacco cultivators (and more generally of farmers in Poland) towards this form of enterprise,

¹ *O wynikach wykonania Planu 6-letniego i podstawowych założeniach Planu 5-letniego w latach 1956–1960*, Warszawa 1956, p. 41.

² As J. Kaliński writes, a similar zeal at the beginning of the co-operatives programme showed the public administration but in the opposite direction, i.e. establishing these co-operatives. See J. Kaliński, *Przemiany strukturalne w gospodarce polskiej w latach 1944–1970*, Warszawa 1993, p. 92. See also J. Skodlarski, *Zarys historii gospodarczej Polski*, Warszawa–Łódź 2000, p. 441 u.; W. Morawski, *Dzieje gospodarcze Polski*, Warszawa 2011, p. 269.

³ E. Kościk, *Migracje ze wsi do miast w latach PRL ze szczególnym uwzględnieniem Dolnego Śląska*, [in:] *Modernizacja czy pozorna modernizacja. Społeczno-ekonomiczny bilans PRL 1944–1959*, ed. J. Chumiński, Wrocław 2010, p. 305. What is interesting is that five volunteers were needed to establish co-operatives in the countryside, which resulted in a faster increase of co-operatives than the number of members. See A. Jezierski, C. Leszczyńska, *Historia gospodarcza Polski*, Warszawa 2001, p. 514.

⁴ S. Żmijko, *O sytuacji w spółdzielczości produkcyjnej*, „Nowe Rolnictwo” 5, 1957, p. 212.

⁵ J. Czyszkowska, *Stan spółdzielczości produkcyjnej*, „Nowe Rolnictwo” 18, 1957, 774.

⁶ J. Kaliński, *Historia gospodarcza Polski Ludowej*, Białystok 2005, p. 58.

which was not consistent with their earlier experience and against which they protested. Despite this, the tobacco industry had great expectations for this form of co-operative cultivation in hopes of furthering the mechanisation of production, which was underdeveloped in rural Poland. Thus, the first attempts to stimulate and promote the mechanisation of many elements of the process of the labour-intensive process of tobacco cultivation were undertaken there.

The resignation from forced agricultural collectivisation after 1956 did not by any means signal that the regime had abandoned ideas related to the functioning of rural co-operatives and collective farms continued to be supported. The policy emphasising that the development of production co-operatives would be most beneficial for Polish agriculture was also continued.⁷ During the harvest festival celebrations in 1958, Gomulka attempted to persuade Polish farmers to join the co-operative forms of production: "The need for the mechanisation of agriculture, which is possible on a large scale only on broad areas of land, also supports the idea of production co-operatives."⁸ In fact, these words were utterly incorrect with reference to the tobacco cultivation in Poland, as tobacco was raised on small plantations with an average area of 2 ha mostly by small individual farms with an excess of hired hands. 80% of tobacco cultivation took place on farms smaller than 5 ha.⁹ The scope of mechanisation of tobacco cultivation was rather insignificant and problems with mechanising the work were reflected in the nature of production. The greatest workload fell on activities directly affecting the quality of the raw tobacco, which had to be performed manually. These include collecting the tobacco, drying it, handling it, etc.¹⁰

⁷ The ideological axiom of the need to nationalise agriculture, preferring collective farms at the expense of private ones, would continue in Poland for a long time. See S. Straszak-Chandoha, *Polityczno-ekonomiczne uwarunkowania sytuacji rolnictwa w PRL*, [in:] *Modernizacja czy pozorna modernizacja...*, p. 381. There were 1,962 production co-operatives in Poland at the end of 1959, from which 1,703 took part in sharing income. Newly organised co-operatives and those leading the collective economy did not share income. See M. Bajorek, *Wyniki gospodarcze spółdzielni produkcyjnych w roku 1959*, „Nowe Rolnictwo” 14, 1960, p. 9. In 1957–1959 about 700 co-operatives were formed, and from January to April 1960 – 232. Most of them were formed on so-called old land – in the provinces of Poznań, Lublin, Bydgoszcz, Warszawa, etc. See S. Paśko, *Nowo zorganizowane spółdzielnie produkcyjne wymagają pomocy*, „Nowe Rolnictwo” 11, 1960, p. 6. *Statystyka spółdzielni* issued by the Principal Co-operative Council. The Economic-Organisational Department indicates 1,668 collective farms (with shared income) in Poland in 1960. See *Statystyka spółdzielni za 1963 rok i lata 1945–1963*, Warszawa 1964, p. 93.

⁸ Archiwum Akt Nowych (henceforth: AAN), KC PZPR, 237/XII/225, O socjalistycznej przebudowie wsi w Polsce Ludowej (27 listopada 1958 r.), p. 212.

⁹ K. Bujanowski, *Produkcja i obrót tytoniem w Polsce (Studium nad efektywnością rozwoju produkcji spożycia, importu i eksportu)*, Warszawa 1970, p. 55; 65–67.

¹⁰ AAN, Tobacco Industry Union in Warsaw 1953–1980 (henceforth: ZPT), Zjednoczenie Przemysłu Tytoniowego. Wydział Ekonomiczny. Analiza Działalności Zjednoczenia Przemysłu Tytoniowego za r. 1959 i 1960, R. 1959/60, 1/82 (henceforth: ZPTWE 1/82), Analiza działalności gospodarczej przemysłu tytoniowego za rok 1960 (henceforth: ADG 60), p. 13–14. It was also pointed that propagated abroad devices to mechanize such activities, as planting the tobacco

In 1950, the area of tobacco cultivation by production co-operatives constituted 0.12% of the total land on which tobacco was planted in Poland. By 1955 it was 1.46%,¹¹ and in 1956 – 1.3%. The following year, as a result of the majority of these co-operatives being dissolved, the area significantly decreased to 0.09% (!). Moreover, the results of tobacco cultivation in the production co-operatives between 1956–1960 were not the highest. Table 1 presents this phenomenon.

Table 1

Tobacco cultivation in production co-operatives between 1956–1960

Year	Number of tobacco co-operatives	Area of tobacco cultivation in co-operatives (ha)	Productivity in q/ha	
			In co-operatives	National total
1956	488	441.4	6.0	9.9
1957	36	28.2	15.4	17.1
1958	31	38.5	9.0	12.2
1959	28	27.8	10.2	13.8
1960	45	35.9	7.0	10.5

Source: AAN, ZPT, Zjednoczenie Przemysłu Tytoniowego Wydz[iał] Ekonomiczny. Analiza wykonania zadań planu 5-letniego na lata 1956–1960 przez przemysł tytoniowy, R. 1960, 1/86 (henceforth: ZPTWE 1/86), Analiza wykonania zadań planu 5-letniego na lata 1956–1960 przez przemysł tytoniowy (henceforth: AWZP), p. 16; AAN, ZPT, ZPTWE 1/82, ADG 60, p. 14.

The number of tobacco co-operatives dropped in the second half of 1950s from 488 in 1956 to 45 in 1960, i.e. almost 89%. Furthermore, the area contracted at that time by co-operatives for tobacco cultivation dropped by almost 92%. In the year directly preceding the Five Year Plan (1955), production co-operatives were contracted to produce tobacco on an area totalling 475 ha.¹²

As an example, one can point to the poor harvest in 1956 resulted in a significant outflow from the co-operative in Przypisówce of its members, who seized back their lands, which were among the best in the entire co-operative. In 1956, only 426 kg/ha of tobacco was obtained from 4 ha (with average of 642 kg/ha in the sub-district), while 1345 kg/ha was harvested in the previous year. As the manager for cultivation sub-district in Lubartów in the Lublin

plant, threading leaves, affected in a relatively small extent on reduced general labour costs. See *ibidem*, p. 14.

¹¹ AAN, ZPT, Zjednoczenie Przemysłu Tytoniowego. Monografia i program rekonstrukcji organizacyjno-technicznej przemysłu tytoniowego, generalne założenia rozwoju, R. 1966, 1/25 (henceforth: ZPTM 1/25), Monografia i program rekonstrukcji organizacyjno-technicznej przemysłu tytoniowego. Generalne założenia rozwoju, Warszawa 1966, p. 51.

¹² *Rocznik Statystyczny 1956*, Warszawa 1956, p. 186.

province Mieczysław Pędzisz stated, despite the outflow of a considerable number of members, the co-operative decided continue with the cultivation of tobacco in 1957. In 1958, the income of the Agricultural Co-operative Unit in Przypisówka obtained from tobacco cultivation amounted to 64,000 złoty. This sum was sufficient to cover the costs of cultivation and brought considerable income to members of the co-operative.¹³

The “22 July” Agricultural Co-operative Unit in Łaszczówka (Tomaszów Lubelski sub-district), established in 1953 by eight people, did not give up tobacco cultivation after 1956, either. Farmers who had previously cultivated tobacco individually continued production after the co-operative was established, but on an area not exceeding 1 hectare per person. At first, the results were not satisfactory. Yet with each passing year members of the co-operative learnt more about tobacco cultivation, were more diligent in performing all necessary work on the plantation, planned more precisely and performed all duties associated with tobacco production. In 1960, the Co-operative in Łaszczówka, which cultivated the Skroniowska Virginia type of tobacco, obtained a productivity of 13.5 quintals/ha (the annual average productivity in the country was 10.5 quintals/ha); the gross income from tobacco cultivation amounted to 50,240 złoty. In 1960, five new members joined the co-operative and the area designated for tobacco cultivation increased to 1.5 ha for 1961.¹⁴

It should be strongly emphasised that the production co-operatives in Przypisówka and Łaszczówka were exceptions to the rule in Poland. Normally, co-operatives were incredibly reluctant to enter into a contract for a labour-intensive crop such as tobacco. State-owned agricultural farms barely cultivated tobacco at all.¹⁵

In the final year of the Five Year Plan, the number of tobacco-producing co-operatives increased slightly. At the same time, it was obvious throughout the entire five-year period that productivity in production co-operatives was not satisfactory and was below the average level for the country as a whole every year.¹⁶ The cultivation and financial results obtained by the co-operatives in 1960 are presented in Table 2.

¹³ M. Pędzisz, *Zbiór tytoniu w Spółdzielni Produkcyjnej w Przypisówce*, „Wiadomości Tytoniowe”, 6 (91–92), 1957; S. Warchoń, *Wyniki uprawy tytoniu w Spółdzielni Produkcyjnej „Przypisówka” w latach 1957 i 1958*, „Wiadomości Tytoniowe” 8, 1959, p. 116–117.

¹⁴ T. Krawczyk, *Jak zorganizowano uprawę tytoniu w Spółdzielni Produkcyjnej w Łaszczówce*, „Wiadomości Tytoniowe” 9, 1961, p. 139–140.

¹⁵ See J. Dragon, *Organizacja i rejonizacja uprawy tytoniu w Polsce*, [in:] *Tytoń. Uprawa, hodowla, fermentacja*, Warszawa 1969, p. 137. In 1957–1958 state farms planting tobacco constituted 0.04% of all farms in Poland dealing with the cultivation of this plant. See AAN, ZPT, ZPTM 1/25, *Monografia i program rekonstrukcji...*, p. 49.

¹⁶ AAN, ZPT, ZPTWE 1/82, ADG 60, p. 14; AAN, ZPT, ZPTWE 1/86, AWZP, p. 16–17.

Table 2

Results obtained by the tobacco co-operatives in various districts in Poland, 1960

Cultivation district	Number of co-operatives	Area of tobacco cultivation (ha)	Productivity (quintal/ha)
Kraków	14	14.0	10.2
Jędrzejów	7	4.4	4.5
Lublin	9	8.9	6.0
Leżajsk	8	3.6	4.4
Grudziądz	5	3.6	8.0
Wodzisław Śląski	1	0.6	2.5
Total*	44	35.1	7.5

* Collective data differs slightly from the value presented in Table 1.

Source: Archiwum Narodowe w Krakowie. Ekspozycja w Spytkowicach (henceforth: ANKES), Zakłady Przemysłu Tytoniowego SA w Krakowie. [1877]. 1945–2002 (henceforth: ZPTK), Wodzisławska Wytwórnia Tytoniu Przemysłowego w Wodzisławiu Śląskim (henceforth: WWTP), 24. Prot[okoły] i Uchwały z posiedzeń Kolegium Dyrektorów Z.P.T 1962 (henceforth: 24 PiU), Analiza Działalności Gospodarczej Przemysłu Tytoniowego za r. 1961 (henceforth: ADG 61), p. 28.

The average area of tobacco cultivation in co-operatives was smaller than 1 ha (in 1960 it dropped to 0.8 ha) in most years. Income per hectare in the co-operatives was also not impressive; in 1960 the average income was 17,000 złoty per hectare, while the national average exceeded 23,000 złoty.¹⁷

The director of the Wodzisław Śląski Industrial Tobacco Plant complained that the period of intensive agriculture collectivisation has deprived the plant of a considerable amount of land for crop cultivation, particularly in the Racibórz and Głubczyce districts. After the establishment of the production co-operatives, villages which had traditionally devoted a few hectares to the cultivation of tobacco either were no longer interested in doing so or reduced the cultivation areas to 0.5 or 1 ha. Following numerous economic and administrative conflicts, the production co-operatives ended up producing about 40% of the tobacco. The initial results were weak, but over time cultivation in the co-operatives started to stabilise. Then almost all of the co-operatives were dissolved. The cultivation area contracted in the autumn of 1956 for 1957 disappeared altogether, resulting in a very difficult year for the tobacco industry.¹⁸

However, the director of Tobacco Industry Holding (Zjednoczenie Przemysłu Tytoniowego – ZPT) indicated at the beginning of 1960 that the prospects for the structural development of the Polish countryside required

¹⁷ ANKES, ZPTK, WWTP, 24 PiU, ADG 61, p. 28; J. Skiendzielewski, J. Biskup, *Cultivation of bright cigarette tobacco plants*, Warszawa 1966, p. 5.

¹⁸ K. Piskorz, *Okręg śląski nie może być na szarym końcu*, „Wiadomości Tytoniowe” 2, 1958, p. 30.

that the tobacco industry orient itself towards production co-operatives. He called for the members of Board of the ZPT to promote tobacco cultivation in co-operatives, whilst not forgetting efforts to reduce its labour consumption.¹⁹ As previously mentioned, the tobacco industry, anticipating further agricultural collectivisation, undertook many measures in co-operation with the production co-operatives with regards to their interest in tobacco cultivation, providing them with assistance and agricultural technology. This was also tied to the implementation of the framework guidelines of the Board of the Ministry of Food Industry and Acquisition of 20 July 1960 on enhancing the impact of the state food industry on the development of agricultural production in production co-operatives and increasing the supply of raw agricultural materials from these farms. In areas devoted to the cultivation of tobacco, the tobacco industry decided to promote the cultivation of this plant in the co-operatives by all possible means. The co-operative was assured profitability through the selection of appropriate plant varieties, being supplied with chemicals and the proper equipment for combatting diseases and vermin, as well as the appropriate means of production (fertilisers, inspection equipment, materials for the construction of drying rooms, etc.). Specialised courses and training in rational cultivation were organised for members of co-operatives interested in tobacco cultivation. The co-operatives also received beneficial terms for their raw material haulage. Production co-operatives entered into special contracts that guaranteed them a 1% bonus for its full implementation. In order to increase the interest of co-operatives in utilising rational tobacco farming methods, special awards for the best results were introduced to the instruction plan for tobacco cultivators for 1961.

In the 1961 campaign the Industrial Tobacco Plants were obligated to choose at least one co-operative which was to serve as an ideal reference for problem-solving in the cultivation of tobacco on large farms.²⁰ One such ideal production co-operative was the “Pokój” Agricultural Co-operative in Nieprowice in the Pińczów district, which was established in 1953. In 1954, the co-operative planted 1.125 ha of tobacco and 2.134 ha the follow year, with the gross income per hectare amounting to 50,052 złoty. In 1956, only 1.5 ha was contracted for tobacco cultivation due to the construction of a new barn and six houses. Despite this, the co-operative’s income per hectare exceeded 106,000 złoty. By 1957, 3 ha of tobacco were contracted with a view to enlarge

¹⁹ ANKES, ZPTK, WWPT, 22. Protokoły i Uchwały z posiedzeń Kolegium Dyrektorów ZPT. 1960 (farther: 22 PiU), Protokół 1/1960 z posiedzenia Kolegium Zjednoczenia Przemysłu Tytoniowego w dniu 31 marca i 1 kwietnia 1960 r., p. 10. See also ANKES, ZPTK, WWPT, 23. Protokoły i Uchwały z posiedzeń Kolegium Dyrektorów ZPT 1961 (farther: 23 PiU), Wytyczne dla Wytwórni Tytoniu Przemysłowego dotyczące realizacji założeń 5-letniego planu uprawy tytoniu, p. 1.

²⁰ AAN, ZPT, ZPTWE 1/82, ADG 60, p. 14–15.

this area to 5 ha.²¹ Co-operatives in Jarosławice, Jakubowice, Bieździadce and Czystochleb-Wąbrzeźno were also, along with Nieprawice, under the special supervision of the tobacco industry.²²

These co-operatives were to be granted preferential access to equipment already extant in the country for mechanising tobacco cultivation.²³ It was clear that the introduction of mechanised tobacco cultivation would be very difficult because only the Institute for the Mechanisation and Electrification of Agriculture dealt with these processes, and, since barely 0.2% of arable land in Poland was used for tobacco cultivation, the industry's needs were frequently superseded by those of others. However, the tobacco industry made efforts to mechanise certain parts of the general tobacco production process.²⁴ For example, the collection of tobacco leaves, particularly threading them, was an extremely time-consuming process and in Poland was always done manually. Thus, the Polish tobacco industry wanted to mechanise this process. A threading device that would replace the manual process had to meet two essential parameters: first, it should be of appropriate capacity; secondly, it had to be cheap because producers in Poland were unwilling to commit to serious investments.²⁵

A prototype of a simple threading device for the mechanical threading of tobacco leaves was designed in 1956 by Bogusław Nawrot and Stefan Nawrot of Dodów in the Proszowice district. They submitted their project to the Kraków Industrial Tobacco Plant in Kraków-Czyżyny.²⁶ The Factory

²¹ A. Pawelec, *Czy oplaca się uprawa tytoniu w spółdzielniach produkcyjnych*, „Wiadomości Tytoniowe” 4, 1957, p. 55–56. This objective was achieved in 1962, and in 1963 the co-operative from Nieprawice contracted up to 7 ha of tobacco plants. See: *idem*, *Wyniki uprawy tytoniu Spółdzielni Produkcyjnej Nieprawice*, „Wiadomości Tytoniowe” 10, 1963, p. 157–158.

²² ANKES, ZPTK, WWTP, 24 PiU, ADG 61, p. 28.

²³ AAN, ZPT, ZPTWE 1/82, ADG 60, p. 15.

²⁴ J. Różański, *Mala mechanizacja uprawy tytoniu*, „Wiadomości Tytoniowe” 1, 1960, p. 4. The pace of mechanisation for Polish agricultural as a whole also left much to be desired. Production in a very large number of individual farms continued to be based on manual and horse-draw means until the end of the 1960s. See W. Zaremba, *Mechanizacja rolnictwa w 25-leciu PRL*, „Nowe Rolnictwo” 15–16, 1969, p. 35. However, the Department for Design and Construction of Equipment for the Tobacco Industry (in operation from 1 April 1959), was focused primarily on the production of spare parts for machines used in tobacco enterprises. See e.g. ANKES, ZPTK, Zakład Konstrukcji i Budowy Urządzeń Przemysłu Tytoniowego w Krakowie (farther: ZKiBU), 194. Analiza działalności Zakładu Konstrukcji i Bud[owy] Urządzeń Przemysłu Tytoniowego za rok 1959, Analiza działalności Zakładu Konstrukcji i Budowy Urządzeń Przemysłu Tytoniowego za r. 1959, p. 3–5; ANKES, ZPTK, ZKiBU, 193. Analiza działalności gospodarczej Z.K i B.U. za rok 1960, Kompleksowa analiza ekonomiczno-techniczna działalności ZKiBU.

²⁵ E. Wiśniewski, *Nawlekać ręcznie czy maszynowo*, „Wiadomości Tytoniowe” 3, 1961, p. 42.

²⁶ ANKES, ZPTK, KWTP, 271. Nr Ew[idencyjny] 193. Ob. Ob. Nawrot Bogusław, Nawrot Stefan, “Wniosek dotyczący mechanicznego nawlekania liści tytoniowych” (henceforth: 271 NN), Zgłoszenie projektu pracowniczego wynalazku, udoskonalenia technicznego lub usprawnienia, 23.XI.56, Numer ewidencyjny projektu 193; ANKES, ZPTK, KWTP, 271 NN, Opis projektu

Commission on Invention at the Kraków Industrial Tobacco Plant accepted the project, calling it an original and inventive improvement. At the same time, however, it was stated that the prototype for the device was made of wood and iron and rather primitive. The threading device had a manual drive using a crank and its operation required two workers, one to turn the crank while the second pushed the stalks up to the needles. It also concluded that the prototype required technical reengineering to adapt a foot pedal in order to provide a slight swinging motion for the individual mechanisms. The device also needed to be equipped with a properly constructed transporter that would automatically deliver stalks of tobacco leaves to the threading needle.²⁷ The Department of Tobacco Cultivation at the Kraków Plant viewed the relatively simple design to be an advantage for the device because it could have a wide practical application, and appreciated its well-constructed threading apparatus.²⁸ However, this threading device did not become common in the Polish tobacco industry and in subsequent years further searches for the best device for the mechanical threading of tobacco leaves were conducted.

Tests of the usefulness in Polish conditions of threading devices imported from Switzerland, France and West Germany were undertaken in 1960.²⁹ The tests were conducted at the Experimental Centre in Kazimierza Wielka. Their aim was to ascertain the labour savings in relation to the manual threading of tobacco leaves as well as to examine the possibilities of implementing threading devices on a mass scale in commercial farming. A variety of leaves of heavy tobacco (i.e. Kentucky, Broad-leafed Puławski and Strong Skroniowski) collected the day preceding the experiment were used. Three devices were used: La Vavit (France), Record Universal (West Germany) and MAB (Switzerland). Comparative data from manual threading was collected from planters in Wawrzeńczyce in the Proszowice district (leaves of varying size were threaded with a needle or directly on a wire; the size of leaves had no impact on the speed of threading). The results obtained from the threading devices compared with manual threading are presented in Table 3.

pracowniczego wynalazku, udoskonalenia technicznego lub usprawnienia, 23.XI.56, Numer ewidencyjny projektu 193.

²⁷ ANKES, ZPTK, KWTP, 271 NN, Protokół Nr 75/56 Zakładowej Komisji Wynalazczości w sprawie pracowniczego projektu racjonalizatorskiego. Zakładowa Komisja Wynalazczości przy Krakowskiej Wytwórni Tytoniu Przemysłowego, Numer Ewiden[cyjny] Projek[tu] 193.

²⁸ ANKES, ZPTK, KWTP, 271 NN, Opinia Działu Uprawy Tytoniu dotycząca wniosku racjonalizatorskiego Ob.Ob. Nawrot Bogusław i Nawrot Stefan z miejscowości Dodów, G. Rada Narodowa Radziemice, pow. Proszowice.

²⁹ AAN, ZPT, ZPTWE 1/82, ADG 60, p. 14.

Table 3

Test results of tobacco leaf threading conducted in Kazimierza Wielka and Wawrzeńczyce in 1960

Way of threading	Number of threaded leaves in one hour				Number of people operating the machine
	By 1 person		By the machine	Manual threading ratio (relative numbers)	
	From – to	Average			
Manual	800–1000	900	–	100	–
La Vavit	1200–1300	1250	1200–1300	139	1
Record Universal	1200–1250	1225	2400–2500	136	2
MAB	700–800	750	2100–2400	88	3

Source: M. Prochownik, *Wyniki prób z przydatności nawlekarek do mechanicznego nawlekania liści tytoniowych*, „Wiadomości Tytoniowe” 1, 1961, p. 4.

Analysing the above results, it was concluded that on small, individual farms (which dominated tobacco cultivation at the time) tobacco was planted in small areas and that had a sufficient number of employees, it was more beneficial to use manual threading. In addition, it was emphasised that the possibility for simultaneous sorting – i.e. finding sick, damaged or atypical leaves – was an undeniable advantage over mechanised threading.³⁰

As for the tested threading devices, the best results were obtained using the French device. In privately owned farms which did not have enough employees, the La Vavit device could have practical applications. It was characterised by good threading productivity, approximately 40% higher than manual threading. Its operation was simple and, due to the simple design, the price for the device was reasonable for the average planter.³¹

In the case of larger tobacco plantations such production co-operatives, the Record Universal threading device could be utilised. Its productivity was good and the operation easy and effortless. It allowed for the leaves to be threaded on both wire and string. The threaded leaves only suffered slight damage from the machinery, and only in the area the nerve was punctured. However, this device was much more expensive than the French one, and thus could only be purchased by farmers' associations for collective use.

³⁰ M. Prochownik, *Wyniki prób z przydatności nawlekarek...*, p. 3–5. See also M. Pędzisz, *Plantatorzy z miejscowości Nowodwór sortowanie zaczynają przy zbiorach*, „Wiadomości Tytoniowe” 7, 1961, p. 110–111; J. Czochra, *Jak zmniejszyć robociznę w czasie przygotowania tytoniu do wykupu*, „Wiadomości Tytoniowe” 8, 1961, p. 119.

³¹ M. Prochownik, *Wyniki prób z przydatności nawlekarek...*, p. 5; AAN, ZPT, ZPTWE 1/82, ADG 60, p. 14.

The worst results were achieved by the MAB device from Switzerland. There was little chance for its success among tobacco planters in Poland due to its complicated and tiring operation. Additionally, it threaded only 44 leaves on a string, so using the device necessitated the reconstruction of the existing drying scaffolding in the tobacco drying rooms.³²

After the tests carried out at the Centre for Tobacco Cultivation in Kazimiera Wielka, it was decided that the efficiency of the machines imported from abroad was too small and purchasing them was not cost-effective for tobacco growers. The idea of purchasing foreign threading devices was abandoned, as it would not bring sufficient profit in the Polish conditions.³³ Additionally, five machines for this type of work were built by the tobacco industry itself for testing and the possibility of redistributing mechanical threading at a later date.³⁴

Although tackled by many designers, the problem of mechanising the threading of tobacco leaves was not solved during the era of the Five Year Plan. An ideal solution could not be found. The tested devices, both foreign and Polish prototypes, either revealed technical problems in use or were simply too expensive for small plantations. Therefore, the labour-intensive practise of manually threading leaves remained a burden for all tobacco growers in Poland.³⁵

The situation differed with regards to the mechanisation of planting, as the first mechanical planter was imported by the tobacco industry from the Soviet Union already in 1952. Once again, the device was not efficient for small Polish cultivation areas. During the first Five Year Plan, a prototype for a planter constructed at the behest of the State Agricultural Farm was tested, but failed, as did a planter imported from West Germany. Then, the tobacco industry, which had a vested interest in the testing and construction of such a planter, commissioned the Institute for the Mechanisation and Electrification of Agriculture to design a simple planter prototype based on the design by the engineer Sieradzan from Grudziądz. The simple design and low cost were supposed to be the strengths of this planter. The machine was supposed to be drawn by one horse and operated by three workers – one coachman and two others putting plants into the planting apparatus. However, the undertaking also failed. The constructed device was not sufficiently accurate, and it was difficult to adapt it to the varying types of soil. Therefore, works on the prototype were suspended and it was not sent to industrial production. Later works on the manual planter were carried out in the Central Laboratory of the Tobacco Industry.³⁶

³² M. Prochownik, *Wyniki prób z przydatności nawlekarek...*, p. 5.

³³ Redakcja, *Drogi Czytelniku*, „Wiadomości Tytoniowe” 5, 1968, p. 82.

³⁴ AAN, ZPT, ZPTWE 1/82, ADG 60, p. 14.

³⁵ A. Ostrowski, *Nawlekarka do tytoniu*, „Wiadomości Tytoniowe” 12, 1962, p. 188.

³⁶ E. Wiśniewski, *Mała mechanizacja przy sadzeniu tytoniu*, „Wiadomości Tytoniowe” 4, 1960, p. 51–52. Research regarding planters and other tools used in planting and cultivation, sowers, machines for harvesting root crops, etc. carried out by the research unit of Agricultural

In spring 1960, the centre in Skroniów, in co-operation with the Institute for the Mechanisation and Electrification of Agriculture, carried out tests of the Accord mechanical planter. It planted two rows of tobacco at once and was operated by three workers, one of whom being the driver of a tractor pulling the planter. The planter's performance per person and per hour was 1500–2000 plants. With manual planting, the labour productivity of experienced and efficient workers ranged between 400 and 500 plants per hour. It was clear that using this planter was extremely efficient. Based on the conducted tests, it was evident that the size of the seedlings had major impact on the machine's efficiency, and small seedlings of less than 5 cm could not be planted at all. The best results were obtained using large, strong seedlings measuring 10–12 cm. Planting density depended on the experience of the workers and the power force of the Zetor tractor, which was used in the tests.

The Skroniów centre also conducted tests with a horse drawn planter, which was operated by one person. Based on observation, it was concluded that the best power was provided by a calm, slow horse, while the young Skroniów horses moved too energetically and therefore were not suitable for this sort of work. It was also decided to carry out tests in the area of Włoszczowa using cows, animals that are generally slow and calm (cows as draught animals in the tobacco industry were used in France and Germany, for example); but the tests did not produce satisfactory results. The cows drew the planter unevenly, moved about and often destroyed adjacent rows. When the cows were replaced by a calm horse, the results were far better. High efficiency and dense planting was achieved, and the plants took root well.³⁷

Additionally, at the end of 1960, three mechanical planters were imported from abroad to be tested in Polish conditions.³⁸ The introduction of machines and tools constructed solely for tobacco cultivation on Polish plantations was a difficult task because their use (as in the case of a planter) was limited to a few hours annually on a typical plantation. However, there were operations which were normally carried out manually in Polish tobacco fields and which could be greatly simplified even in small areas. Firstly, there was the issue of crop spacing (the planting of other crops in between rows of tobacco), which was among the extremely labour-intensive activities relating to the cultivation of tobacco. This could be performed using hoe (weeders) and horse-drawn listers (ridgers) – tools that could be found in almost every Polish planter's home. Earlier a number of tools were used for crop spacing, but in many areas

Machinery Factory I, which was part of the Institute for the Mechanisation and Electrification of Agriculture. See *10 lat pracy Instytutu Mechanizacji i Elektryfikacji Rolnictwa w Warszawie 1950–1960*, Warszawa 1960, p. 56.

³⁷ F. Kłasa, *Próba sadzenia tytoniu sadzarką typu „Accord”*, „Wiadomości Tytoniowe” 12, 1960, p. 180–182.

³⁸ AAN, ZPT, ZPTWE 1/82, ADG 60, p. 14.

a simple hoe was still employed. The efficiency of a hoe in crop spacing was 100–200 m²/hour, while efficiency of a hoe and horse-drawn lister (e.g. the RH-3 type, which was a universal tool for crop spacing as a hoe, lister and single-row cultivator) was 1000–2000 m² in the same time. Many planters did not want to use a horse in crop-spacing works for fear of damaging the tobacco in the process. Such concerns were not justified in case of Kentucky tobacco because in this case the distance between the rows was 80–90 cm. In the case of tobacco plants with 50 cm distance between rows, such a danger existed. However, there were planters who used horses in crop-spacing works even with a distance of 50 cm between rows. Similarly, the Experimental Centre for Cultivation in Skroniów introduced cultivation using horses for rows spaced 50 cm apart.³⁹ J. Wojciechowski from that centre emphasised that the usage of horses in tobacco cultivation would contribute significantly to the reduction of labor intensity of this work, and hence reduce production costs of raw materials and increase the profitability of the tobacco plantations. He added that the “irreplaceable” hoe should be used only as a last resort and only where other tools could not replace it.⁴⁰ It is necessary to stress that the tobacco experts’ appeals did not pass unnoticed and spacing between the rows was increasingly optimised through the introduction of manual and horse weeders at the beginning of the 1960s.⁴¹

Looking back at the 1950s and the attempts undertaken to direct the cultivation of tobacco to co-operatives, we must conclude that the scheme failed and the majority of farmers (including tobacco planters) were not convinced to this form of agricultural organisation. Forced collectivisation failed and its stoppage by the PZPR after 1956 resulted in an immediate drop in the number of production co-operatives cultivating tobacco, decreasing by 93% in 1957 compared to the previous year. The area of cultivation in the co-operatives diminished as well: in 1950 it constituted 0.12% of all arable land on which tobacco was cultivated and in 1957 it dropped to 0.09% of the total area of tobacco cultivation in Poland. Moreover, the production efficiency remained unsatisfactory in the production co-operatives and was usually below the average results for the country as a whole. The fact that co-operatives did not willingly contract the cultivation of tobacco as a demanding and time consuming crop is another issue.

³⁹ J. Skindzielewski, *Gęstość sadzenia a konna obróbka*”, „Wiadomości Tytoniowe” 1, 1961, p. 1.

⁴⁰ J. Wojciechowski, *Możliwości stosowania narzędzi konnych przy uprawie międzyrzędzi*, „Wiadomości Tytoniowe” 3, 1961, p. 37.

⁴¹ E. Wiśniewski, *Mała mechanizacja...*, p. 51. Call for application of small mechanisation by using manual and horse weeders, see e.g. Z. Jaworski, M. Wierzba, *Zespoły uprawy tytoniu*, vol. 6, Kraków 1956, p. 14.

Nevertheless the tobacco industry did not entirely give up the idea of propagating tobacco cultivation in co-operatives, seeing perspectives for using mechanising techniques in the large areas of cultivation. Devices used in various stages of tobacco cultivation which were at the disposal of this industry were to be made readily available to all tobacco producers. The cultivation of this crop was time-consuming, and so the tobacco industry stimulated works aimed at the mechanisation of certain tasks connected with tobacco production, such as planting or threading. No significant results were achieved by the end of the 1950s, so the process was continued in subsequent years. In 1960, the Deputy Head of the ZPT Cultivation Department, Jan Skiendzielewski, emphasised strongly that the issue of the mechanisation of cultivation should constantly be taken into account in the works of the Central Laboratory of the Tobacco Industry.⁴²

Bibliography

Sources

AAN, KC PZPR.

AAN, Zjednoczenie Przemysłu Tytoniowego w Warszawie 1953–1980.

Archiwum Narodowe w Krakowie. Ekspozycja w Spytkowicach, Zakłady Przemysłu Tytoniowego SA w Krakowie. [1877]. 1945–2002.

Statistical Data

Rocznik Statystyczny 1956, Warszawa 1956.

Statystyka spółdzielni za 1963 rok i lata 1945–1963, Warszawa 1964.

Secondary Literature

10 lat pracy Instytutu Mechanizacji i Elektryfikacji Rolnictwa w Warszawie 1950–1960, Warszawa 1960.

Bajorek M., *Wyniki gospodarcze spółdzielni produkcyjnych w roku 1959*, „Nowe Rolnictwo” 14, 1960.

Bujanowski K., *Produkcja i obrót tytoniem w Polsce (Studium nad efektywnością rozwoju produkcji spożycia, importu i eksportu)*, Warszawa 1970.

Czochra J., *Jak zmniejszyć robociznę w czasie przygotowania tytoniu do wykupu*, „Wiadomości Tytoniowe” 8, 1961.

Czyszkowska J., *Stan spółdzielczości produkcyjnej*, „Nowe Rolnictwo” 18, 1957.

Dragon J., *Organizacja i rejonizacja uprawy tytoniu w Polsce*, [in:] *Tytoń. Uprawa, hodowla, fermentacja*, Warszawa 1969.

Jaworski Z., Wierzba M., *Zespoły uprawy tytoniu*, vol. 6, Kraków 1956.

Jezierski A., Leszczyńska C., *Historia gospodarcza Polski*, Warszawa 2001.

⁴² ANKES, ZPTK, WWPT, 22 PiU, Protokół 2/60 z posiedzenia Kolegium Zjednoczenia Przem[yślu] Tyt[oniowego] z dnia 13 lipca 1960 r., p. 5.

- Kaliński J., *Historia gospodarcza Polski Ludowej*, Białystok 2005.
- Kaliński J., *Przemiany strukturalne w gospodarce polskiej w latach 1944–1970*, Warszawa 1993.
- Kościk E., *Migracje ze wsi do miast w latach PRL ze szczególnym uwzględnieniem Dolnego Śląska*, [in:] *Modernizacja czy pozorna modernizacja. Społeczno-ekonomiczny bilans PRL 1944–1959*, ed. J. Chumiński, Wrocław 2010.
- Klasa F., *Próba sadzenia tytoniu sadzarką typu „Accord”*, „Wiadomości Tytoniowe” 12, 1960.
- Krawczyk T., *Jak zorganizowano uprawę tytoniu w Spółdzielni Produkcyjnej w Łaszczówce*, „Wiadomości Tytoniowe” 9, 1961.
- Morawski W., *Dzieje gospodarcze Polski*, Warszawa 2011.
- Ostrowski A., *Nawlekarka do tytoniu*, „Wiadomości Tytoniowe” 12, 1962.
- O wynikach wykonania Planu 6-letniego i podstawowych założeniach Planu 5-letniego w latach 1956–1960*, Warszawa 1956.
- Pawelec A., *Czy opłaca się uprawa tytoniu w spółdzielniach produkcyjnych?*, „Wiadomości Tytoniowe” 4, 1957.
- Pawelec A., *Wyniki uprawy tytoniu Spółdzielni Produkcyjnej Nieprowice*, „Wiadomości Tytoniowe” 10, 1963.
- Pędzisz M., *Plantatorzy z miejscowości Nowodwór sortowanie zaczynają przy zbiorach*, „Wiadomości Tytoniowe” 7, 1961.
- Pędzisz M., *Zbiór tytoniu w Spółdzielni Produkcyjnej w Przypisówce*, „Wiadomości Tytoniowe” 6, 1957.
- Piskorz K., *Okręg śląski nie może być na szarym końcu*, „Wiadomości Tytoniowe” 2, 1958.
- Prochownik M., *Wyniki prób z przydatności nawlekarek do mechanicznego nawlekania liści tytoniowych*, „Wiadomości Tytoniowe” 1, 1961.
- Redakcja, *Drogi Czytelniku*, „Wiadomości Tytoniowe” 5, 1968.
- Różański J., *Mala mechanizacja uprawy tytoniu*, „Wiadomości Tytoniowe” 1, 1960.
- Skiendzielewski J., *Gęstość sadzenia a konna obróbka*, „Wiadomości Tytoniowe” 1, 1961.
- Skiendzielewski J., Biskup J., *Uprawa tytoni papierosowych jasnych*, Warszawa 1966.
- Skodlarski J., *Zarys historii gospodarczej Polski*, Warszawa–Łódź 2000.
- Straszak-Chandoha S., *Polityczno-ekonomiczne uwarunkowania sytuacji rolnictwa w PRL*, [in:] *Modernizacja czy pozorna modernizacja. Społeczno-ekonomiczny bilans PRL 1944–1959*, ed. J. Chumiński, Wrocław 2010.
- Warchoń S., *Wyniki uprawy tytoniu w Spółdzielni Produkcyjnej „Przypisówka” w latach 1957 i 1958*, „Wiadomości Tytoniowe” 8, 1959.
- Wiśniewski E., *Mala mechanizacja przy sadzeniu tytoniu*, „Wiadomości Tytoniowe” 4, 1960.
- Wiśniewski E., *Nawlekać ręcznie czy maszynowo*, „Wiadomości Tytoniowe” 3, 1961.
- Wojciechowski J., *Możliwości stosowania narzędzi konnych przy uprawie międzyrzędzi*, „Wiadomości Tytoniowe” 3, 1961.
- Zaremba W., *Mechanizacja rolnictwa w 25-leciu PRL*, „Nowe Rolnictwo” 15–16, 1969.
- Zmijko S., *O sytuacji w spółdzielczości produkcyjnej*, „Nowe Rolnictwo” 5, 1957.

Andrzej Synowiec
(Uniwersytet Jagielloński, Kraków)

Z DZIEJÓW PRZEMYSŁU TYTONIOWEGO NA ZIEMIACH POLSKICH
– UPRAWA TYTONIU W SPÓŁDZIELNIACH PRODUKCYJNYCH
ORAZ PROBLEM MECHANIZACJI UPRAWY W LATACH 50. XX WIEKU

Streszczenie

Przemysł tytoniowy w związku z realizowaną po II wojnie światowej kolektywizacją rolnictwa był w oczywisty sposób zainteresowany kwestią wprowadzania uprawy tytoniu do spółdzielni produkcyjnych. Tworzenie takich spółdzielni stanowiło jedną z wytycznych odnoszących się do polskiej wsi w latach pierwszego planu pięcioletniego (1956–1960). Przełom października 1956 r. był początkiem nowego etapu w polityce rolnej władz komunistycznych. Z przymusowej kolektywizacji rolnictwa przynajmniej formalnie zrezygnowano. W tym czasie można było zaobserwować spadek liczby spółdzielni produkcyjnych i wzrost liczby gospodarstw indywidualnych.

W 1950 r. powierzchnia uprawy tytoniu przez spółdzielnie produkcyjne stanowiła 0,12% ogólnej powierzchni, na której w Polsce uprawiano tytoń, w 1955 r. było to już 1,46%, w 1956 – 1,3%, a w następnym roku, na skutek rozwiązania się większości tych spółdzielni, wyniosła jedynie 0,09%. Liczba spółdzielni uprawiających tytoń zmniejszyła się z 488 w 1956 r. do 36 w 1960 r., a więc o niemal 74%.

Spółdzielcom w pierwszej kolejności miano udostępniać istniejące w kraju urządzenia do zmechanizowania uprawy tytoniu. Uprawa tytoniu była bardzo czasochłonna, dlatego przemysł tytoniowy podejmował starania w celu mechanizacji pewnych prac przy uprawie tytoniu, jak np. nawlekanie liści tytoniowych czy proces sadzenia. Do końca lat 50. XX w. nie udało się osiągnąć zadowalających rezultatów, dlatego prace nad mechanizacją uprawy tytoniu kontynuowano w latach następnych.